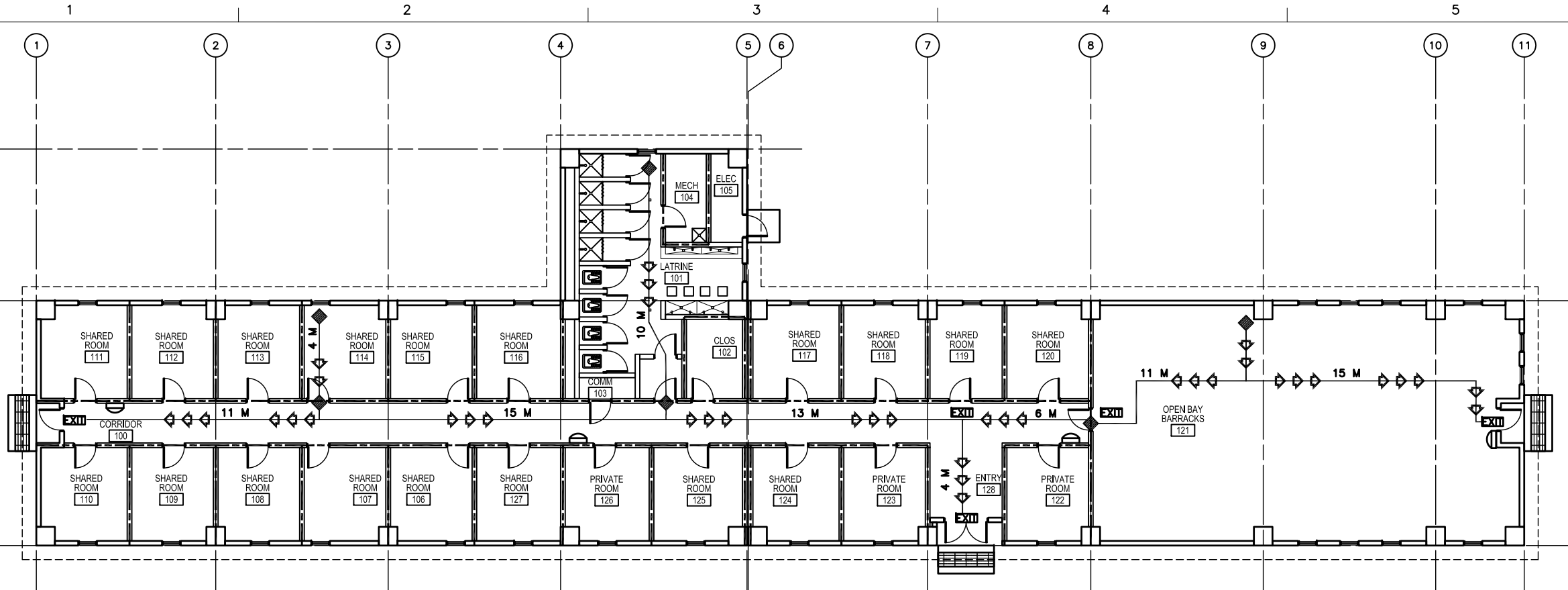


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U.S. ARMY CORPS OF ENGINEERS AFGHANISTAN ENGINEER DISTRICT APO AE 96338	Michael Baker Corp. A unit of Michael Baker Corporation 100 Alameda Drive Burlington, MA 01803 www.mbakercorp.com
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Sheet reference number: A-001



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A-001
LIFE SAFETY PLAN
SCALE: 1:100

CODE ANALYSIS:

- REFERENCES:**
2006 INTERNATIONAL BUILDING CODE (2006 IBC)
2006 LIFE SAFETY CODE (2006 NFPA 101)
- IBC OCCUPANCY CLASSIFICATION:**
GROUP R-2 (NEW HOTELS AND DORMITORIES NFPA 101 6.1.8 AND CHAPTER 28)
- TYPE OF CONSTRUCTION (IBC):** TYPE II-B (UNPROTECTED/NONSPRINKLERED)
- IBC TABLE 503: ALLOWABLE HEIGHT AND BUILDING AREAS:**
GROUP R-2
ALLOWABLE AREA: 1486 SM
ALLOWABLE HEIGHT: 4 STORIES (16 M)
GROUP R-2
PROPOSED AREA: 723 SM
PROPOSED HEIGHT: 1 STORY (<16 M)
- IBC TABLE 601 & 602: FIRE RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS FOR TYPE II-B**

BUILDING ELEMENT	RATING (HOUR)	REFERENCE
STRUCTURAL FRAME (COLUMNS, GIRDERS & TRUSSES)	0	TABLE 601
BEARING WALLS EXTERIOR INTERIOR	0 0	TABLE 601 TABLE 601
NONBEARING WALLS & PARTITIONS INTERIOR	0	TABLE 601
FLOOR CONSTRUCTION	0	TABLE 601
ROOF CONSTRUCTION	0	TABLE 601
EXTERIOR WALL	0	TABLE 602
- IBC TABLE 803.5 - INTERIOR WALL AND CEILING FINISH REQUIREMENTS FOR R-2 OCCUPANCY/NONSPRINKLERED**

GROUP	EXIT ENCLOSURES AND EXIT PASSAGEWAY	CORRIDORS	ROOMS AND ENCLOSED SPACES
R-2	B	B	C

- NFPA 101 TABLE 7.3.1.2 - OCCUPANT LOAD**
HOTELS AND DORMITORIES = 18.6 SM/PERSON
CALCULATED = 39 OCCUPANTS
ACTUAL = 61 OCCUPANTS
- NFPA 101 TABLE 7.3.3.1 - EGRESS CAPACITY**
HOTELS AND DORMITORIES = 5 MM PER OCCUPANT
MINIMUM REQUIRED: 305 MM (61 OCCUPANTS x 5 MM PER OCCUPANT)
PROPOSED EGRESS CAPACITY: 3600 MM: (4) 900 MM DOORS
- NFPA 101 PARAGRAPH 28.2.6 - EXIT ACCESS TRAVEL DISTANCE**
MAXIMUM ALLOWED WITHIN ROOM OR SUITE TO CORRIDOR: 23 METERS
MAXIMUM ALLOWED CORRIDOR DOOR OF ANY ROOM OR SUITE TO NEAREST EXIT: 30 METERS
PROPOSED WITHIN ROOM OR SUITE TO CORRIDOR: 4 METERS MOST ROOMS, 15 METERS ROOM 121
PROPOSED CORRIDOR DOOR OF ANY ROOM OR SUITE TO NEAREST EXIT: 26 METERS
STORAGE ROOMS: 1 HOUR SEPARATION REQUIRED.
- NFPA 101 PARAGRAPH 28.3.6.1.2 - CORRIDOR FIRE-RESISTANCE RATING (HOUR)**
REQUIRED: WALLS NOT LESS THAN ONE HOUR FIRE RESISTANCE RATING
PROPOSED: 1 HOUR RATING.
- NFPA 101 PARAGRAPH 28.3.6.2 & TABLE 8.3.4.2 - DOORS INTO EXIT ACCESS CORRIDORS**
REQUIRED MINIMUM: 20 MINUTE FIRE PROTECTION RATING
PROPOSED: 20 MINUTE DOORS
- NFPA 101 PARAGRAPH 28.2.3.3 - CORRIDOR WIDTH**
REQUIRED: SUFFICIENT FOR OCCUPANT LOAD, BUT NOT LESS THAN 1120 MM
CALCULATED WIDTH REQUIRED PER OCCUPANT LOAD: 305 MM (61 OCCUPANTS x 5 MM)
PROVIDED: 1700 MM
- NFPA 101 PARAGRAPH 28.2.5.3 - COMMON PATH OF TRAVEL**
MAXIMUM ALLOWED: 10.7 METERS
PROVIDED: 6 METERS
- NFPA 101 PARAGRAPH 28.2.5.5 - DEAD END CORRIDORS**
PERMITTED: 10.7 METERS
PROPOSED: 6 METERS
- NFPA 101 PARAGRAPH 28.2.4.1 AND 7.4.1.1 - MINIMUM NUMBER OF EXITS**
REQUIRED: 2 MINIMUM
PROPOSED: 3 EXITS
- NFPA 101 PARAGRAPH 28.2.1.2 & 24.2 - SECONDARY MEANS OF ESCAPE**
ONE OF THE FOLLOWING REQUIRED:
1) DOOR, SIMILAR TO PRIMARY, BUT REMOTE FROM PRIMARY
2) OPERABLE WINDOW, 0.53 SM, NOT LESS THAN 510 MM WIDE, 610 MM HIGH, NOT MORE THAN 1120 MM AFF, WITHIN 6100 MM OF GRADE
PROVIDED: OPERABLE WINDOWS, 0.96 SM EACH PER SLEEPING ROOM

- NFPA 101 PARAGRAPH 24.2.2.4 - TWO PRIMARY MEANS OF ESCAPE**
AREA WITH DWELLING UNIT EXCEEDS 185 SM PER STORY
ALLOWED AREA PER STORY WITHIN DWELLING UNIT: 185 SM
PROVIDED AREA WITHIN DWELLING UNIT: 195 SM WITHIN ROOM 121
REQUIRED PRIMARY EXITS: 2
PROVIDED PRIMARY EXITS: 2
- NFPA 101 PARAGRAPH 28.3.7.1 - SUBDIVISION OF BUILDING SPACES - NONSPRINKLERED**
REQUIRED: EACH GUEST ROOM OR DORMITORY ROOM SHALL BE SEPARATED FROM OTHER GUEST OR DORMITORY ROOMS BY FIRE BARRIERS HAVING FIRE RESISTANCE RATING OF NOT LESS THAN 1 HOUR
PROVIDED: 1 HOUR SEPARATION
- HAZARDOUS AREA PROTECTION TABLE 28.3.2.2.2**
STORAGE ROOMS: 1 HOUR SEPARATION REQUIRED
- NFPA 101 A.3.3.5.3 DORMITORY: ROOMS WITHIN DORMITORIES INTENDED FOR THE USE OF INDIVIDUALS FOR COMBINED LIVING AND SLEEPING PURPOSES ARE GUEST ROOMS OR GUEST SUITES. EXAMPLES OF DORMITORIES ARE COLLEGE DORMITORIES, FRATERNITY AND SORORITY HOUSES AND MILITARY BARRACKS.**
- NFPA 101 28.3.5.2 EXTINGUISHMENT REQUIREMENTS: AUTOMATIC SPRINKLER PROTECTION**
REQUIRED UNLESS SLEEPING ROOMS HAVE DOORS DIRECTLY TO OUTSIDE.
DUE TO AUSTERE DESIGN CRITERIA, THE GOVERNMENT HAS A FIRE PROTECTION WAIVER FOR THIS REQUIREMENT.

LEGEND:

- DENOTES PATHS OF EXIT TRAVEL
- DENOTES DOOR AS AN EMERGENCY EXIT
- DENOTES STARTING POINT FOR TRAVEL DISTANCE
- DENOTES FIRE EXTINGUISHER LOCATIONS
- (1) HOUR RATED WALL
- - - - - (2) HOUR RATED WALL
- (3) HOUR RATED WALL

LINEAR DIMENSIONS SHOWN
ARE IN MILLIMETERS (MM),
UNLESS OTHERWISE NOTED

0 2000 4000
SCALE: 1:100

APPROVED:

A/E DESIGNER OF RECORD
B2